

AMENDMENT UNDER 37 C.F.R. § 1.111  
U.S. Appln. No. 10/772,469

**REMARKS**

Claims 7-22 are all of the pending claims. Claims 7 and 15 are independent claims.

**Claim Objections**

The Examiner has objected to claims 7-22, alleging minor informalities. In response, Applicant has made cosmetic changes to claims 7 and 15.

**Obviousness-Type Double Patenting Rejection**

Claims 7-22 are rejected under the judicially created doctrine of obviousness-type double patenting. Specifically, the Examiner alleges that the claims of this application are obvious in view of the claims of US 6,712,636, from which the above referenced application claims benefit.

As an initial matter, original claims 7-20 of this application are identical to the original claims of parent Application No. 09/282,998 (“the parent application”), which were subject to a restriction requirement on June 14, 2000. Thereafter, claims 7-20 were withdrawn from consideration in the parent application, and this application was properly filed as a divisional, claiming benefit from the parent Application. The parent application then issued as US 6,712,636.

In view of the restriction requirement in the parent application, it is clearly inappropriate for the Examiner to reject these claims under the judicially created doctrine of obviousness-type double patenting. For example, the third sentence of 35 U.S.C. § 121 states:

A patent issuing on an application with respect to which a restriction requirement under this section has been made, or on an application filed as a result of such a requirement, shall not be used as a reference either in the Patent and Trademark Office or in the courts against a divisional application or against the original application or any patent issued on

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either of them, if the application is filed before the issuance of the patent on the other application.

Moreover, this prohibition against double patenting in divisional applications is discussed in detail at MPEP §804.01.

Accordingly, Applicant respectfully requests that the Examiner withdraw the rejection under the judicially created doctrine of obviousness-type double patenting.

**Claim Rejections Under 35 U.S.C. § 103**

Claims 7-22 are rejected under 35 U.S.C. §103(a) as allegedly unpatentable over *previously cited Wayt et al. (US 5,910,027)*. Applicant respectfully traverses this rejection.

According to the rejection, the Examiner asserts that it would have been obvious to modify Wayt so that it would meet this feature. Specifically, the Examiner alleges:

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Wayt et al. to have an elasticity of the flexible arm and an inclination angle of the push-out guide surface [that] are set such that the push-out force generated [is] greater than a contact force caused by mutual connection between male- [and] female-type terminals respectively held within the connectors, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In Re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980), in order to easier connect and disconnect.

However, as discussed at MPEP §2144.04, it is *inappropriate* for the Examiner to rely solely on case law when Applicant has demonstrated a criticality to the specific limitation. In fact, the feature that the Examiner asserts as being obvious is a critical feature of the invention. That is, by providing a connector arrangement according to the invention in which “the elasticity of said flexible arm and the inclination angle of said push-out guide surface are set such that said push-out force generated thereby is greater than a contact resistance caused by a mutual

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connection between male- and female-type terminals respectively held within their associated connectors,” a user of the connector arrangement is able to detect whether there is a partial engagement condition between first and second connectors.<sup>1</sup>

Moreover, the Examiner has not pointed to any objective evidence<sup>2</sup> of a motivation or suggestion to modify Wayt’s connection device so that the force of Wayt’s beams 48 against the ramps 76 “is greater than a contact resistance caused by a mutual connection between male- and female-type terminals respectively held within their associated connectors.<sup>3</sup>

As discussed in the Amendment filed November 10, 2004, although some prior art connectors have used compressive springs to provide this push-out force, there is no objective evidence of any suggestion to design a connector with a flexible arm that provides this function. The claimed invention provides a simplified connector device with a decreased manufacturing cost, a reduced number of parts, and a reduced number of assembly steps.<sup>4</sup>

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<sup>1</sup> See Specification at, for example, page 23, lines 5-14.

<sup>2</sup> The USPTO is held to a *rigorous* standard when trying to show that an invention would have been obvious in view of the combination of two or more references. See, *In re Sang Su Lee*, 61 USPQ2d 1430 (Fed. Cir. 2002), *citing, e.g.*, *In re Dembiczak*, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999) (“Our case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references.”). In *Lee*, the Federal Circuit further emphasized that the “need for specificity pervades this authority.” (*Lee* at 1433 (*citing In re Kotzab*, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000) (“particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed”))). The factual inquiry into whether to combine references “must be based on objective evidence of record.” *Lee* at 1433.

<sup>3</sup> See Wayt at Fig. 6.

<sup>4</sup> See Specification at page 6, line 22-page 7, line 3.

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Finally, the case cited by the Examiner, *In Re Boesch and Slaney*, is only applicable to the optimization of a variable that has been recognized as achieving a result.<sup>5</sup> In *In Re Boesch and Slaney*, the claims were directed to a material having specific amounts of nickel and other elements. The Board of Patent Appeals and Interferences found that “lowering the N<sub>v</sub> value of a Co-Cr-Ni alloy and deletion of metals not consumed in precipitation from the N<sub>v</sub> calculation are expressly suggested” by prior art reference U.S. Patent No. 3,837,838.<sup>6</sup> The U.S. Court of Customs and Patent Appeals relied on this evidence when it upheld the Board’s decision. In contrast, in the present case, as discussed above, there is no such evidence of a suggestion to modify Wayt’s connection device in such a way that it would meet all of the recitations of independent claims 7 and 15.

In addition, in the claimed invention, each of two arm guide surfaces has a preset length that is inclined in a direction in which male and female connectors are engaged. Therefore, when the two connectors are engaged together, the two arm guide surfaces deform elastically the two flexible arms in the mutually engaged range of them to thereby generate a push out force.

In contrast, in Wayt, a lower ramp 78 (regarded as the “arm guide member” by the Examiner) does not have an inclined length for contacting with a beam 48 (regarded as the “flexible arm” by the Examiner) so as to generate the push-out force in the mutually engaged range of the two connectors 12, 14.<sup>7</sup> Namely, contrary to the Examiner’s assertion that it is

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<sup>5</sup> See MPEP §2144.05.

<sup>6</sup> See *In Re Boesch and Slaney*, 205 USPQ at 219.

<sup>7</sup> See modified Fig. 6 of Wayt in the Attachment Sheet.

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obvious to one of ordinary skill in the art at the time, Applicant respectfully submits that one of ordinary skill would appreciate that the structure of Wayt does not generate a push-out force.

Accordingly, Applicant respectfully requests that the Examiner withdraw the rejection of independent claims 7 and 15 for the reasons discussed above, and the rejection of dependent claims 8-14 and 16-22 at least because of their dependency from one of claims 7 and 15.

**Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



John M. Bird  
Registration No. 46,027

SUGHRUE MION, PLLC  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

WASHINGTON OFFICE  
**23373**  
CUSTOMER NUMBER

Date: April 11, 2005

Attorney Docket No.: Q79675